

Abstract

In a method for manufacturing a solid-state imaging device of the present invention, a pad insulting film **2** made of an oxide film and an anti-oxidizing film **3** made of a nitride film are deposited on a n-type semiconductor substrate **1**. Then, an opening **4** is formed to expose an element isolation formation region of the semiconductor substrate **1**.
5 Next, an anti-oxidizing film (not shown) for burying the opening **4** is formed on the substrate and anisotropic etching is performed to form a sidewall **5**. Subsequently, a trench **6** is formed using the anti-oxidizing film **3** and the sidewall **5** as a mask. Then, a p-type impurity is implanted into a part of the semiconductor substrate **1** which is exposed
10 at the side face of the trench **6** and a thermal oxide film is formed in the surface portion of the trench **6** in the semiconductor substrate **1**. Thereafter, the trench **6** is buried with a burying film **8**.